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EXAMINER

HA, LEYNNA A

ART UNIT PAPER NUMBER

2135

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/20/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/685,285

Applicant(s)

HAMMER ET AL.

Examiner

LEYNNA T. HA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 11-65 is/are pending in the application.
- 4a) Of the above claim(s) 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-9 and 11-65 are pending.

Claim 10 is cancelled.

2. This is a Final rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-9 and 11-50, and 56-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shostack, et al. (US 6,298,445), and further in view of Trcka, et al. (US 6,453,345).**

**As per claim 1:**

Shostack, et al. disclose a method for automatically creating a record for one or more security incidents and reactions thereto, comprising the steps of:

recording computer security incident information [col.2, lines 62-63 and col.13, lines 42-43] [with at least one of a date and time stamp], the computer security incident

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information indicating one of suspicious computer activity comprising one or more attacks received from a network [col.4, lines 47-50 and col.5, lines 20-50] that occur prior to a computer security threat [col.7, lines 13-17] and an actual computer security threat; [col.4, lines 50-53]

classifying the computer security incident information; [col.9, lines 59-67]

automatically suggesting one or more computer security threat procedures based on a classification of the computer security incident information; [col.11, lines 52-54]

displaying the one or more suggested computer security threat procedures [col.12, lines 14-25 and 41-47], each computer security threat procedure comprising one or more steps for one of investigating and responding to the computer security incident information; [col.6, lines 58]

*[receiving a selection of a suggested computer security threat procedure from a user, the selection comprising one or more steps of the selected computer security threat procedure;*

executing the selected one or more steps of the procedure; [col.7, lines 56-57]

in response to executing the one or more steps of the selected computer security threat procedure, recording executed computer security threat procedure information and results of the executed one or more steps of the computer security threat procedure *[with at least one of a date and time stamp; and]* [col.7, lines 25-27]

outputting a record comprising the computer security incident information, executed computer security threat procedure information, results of one or more steps of the executed computer security threat procedure [col.13, lines 15-17 and 31-36], the

identity of a user who selected the computer security threat procedure [col.9, lines 16-17 and 56-63], and at least one of a corresponding [*date and time stamp*].

Shostack discusses displaying the one or more suggested computer security threat procedures [col.12, lines 14-25 and 41-47], each computer security threat procedure comprising one or more steps for one of investigating and responding to the computer security incident information [col.6, lines 58 and col.7, lines 25-27]. However, Shostack did not include a date and time stamp and receiving a selection of a suggested computer security threat procedure from a user.

Trcka, et al. discloses an invention that provides a network security and analysis system, which includes a variety of features for automatically and interactively monitoring and analyzing traffic (col.2, lines 11-15 and col.11, lines 1-4). Trcka discloses utilizes archival recordings to evaluate security breaches and other anomalies (col.7, lines 49-50). The archival recordings can be used to perform a wide range of network analysis and restoration tasks that includes checking for newly discovered viruses and performing low-level analysis of network break-ins (col.2, lines 56-61). Trcka discusses the date/time stamp reflects the dates and times that the packets are transmitted on the network (col.15, lines 55-57). Thus, preserve the details of the original timing of the traffic on the network and to facilitate the subsequent reconstruction of network events (col.7, lines 10-12).

Further, the claimed "receiving a selection of a suggested computer security threat procedure from a user, the selection comprising one or more steps of the selected computer security threat procedure", broadly limits a computer security threat

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procedure that is suggested from a user. This does not limit or define what considers a procedure and security threat involves that can be selected or suggested from a user. The claimed subject matter merely suggests as long as the procedure is computer security threat related. For instance, a selection of a suggest computer security threat procedure from a user can broadly be given in light as security configurations to help prevent or monitor security threats, allowing or not allowing particular traffic or incoming packets, a solution to solve security threat, or specifying types of transactions or filtering parameters. Thus, the following will explain and incorporate these examples found in Trcka. Trcka discloses Automated Monitor application uses known data processing techniques (virus checking, transaction, monitoring, etc.) to automatically check for and track suspect network events and one configuration option, a user can enable or disable various visual and audible event alarms (col.17, lines 24-32). The user can configure to alert the user when critical limits are exceeded on the network, generate log file of specific types of events, run analysis applications and perform other interactive actions in the foreground (col.17, lines 35-42). The analysis applications provide various functionality for allowing users to interactively perform non-real-time or off line analyses of pre-recorded raw traffic data (col.17, lines 44-50). This shows the user having the ability to interact, which obviously gives instructions to enable a selection of suggested computer security threat procedures in order to receive a selection of suggested computer security threat procedures from a user (col.20, lines 1-17). In addition, Trcka discloses the GUI allows the user to specify the type or types of transactions that are loaded into the databases and/or routed directly to the analysis applications. The types

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of filtering parameters that can be set by the user include network address, traffic type, packet type, user ID, and packet transaction sequence (col.18, lines 1-14). Trcka discloses the user able to initiate searches of the traffic data at various levels of resolution and search for all packets containing the particular set of source and destination address or for all packets transmitted during a particular time window (col.18, lines 15-52).

Therefore, it would have been obvious for a person of ordinary skills in the art at the time of the invention to combine the teaching of the computer security threat procedure computer based on classification of security incident information as taught by Shostack with the teaching of allowing the user to interactively perform analyses of traffic data such that the receiving a selection of a suggested computer security threat procedure from a user as taught by Trcka because this allows the user to specify computer security threats procedures such as types of transactions that are loaded into the databases (col.18, lines 1-2 and 40-44), configure to generate a log file of specific types of events (col.17, lines 38-50), and traffic analysis of the particular packets (col.20, lines 1-17).

Further, it would have been obvious to combine the teaching of recording computer security incident information and the computer security threat procedure as taught by Shostack with at least one of a date and time stamp as taught by Trcka because this preserves the original timing of the traffic on the network and facilitates subsequent reconstruction of network events (col.7, lines 10-12 and col.14, lines 34-36).

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**As per claim 2:** see Trcka on col.7, lines 1-3; discussing an unmodifiable permanent database.

**As per claim 3:** see Shostack on col.11, lines 5-17 and col.13, lines 50-55; discussing the step of recording the results of the executed computer security threat procedure with a digital signature to enable detection of any modification of the recorded results, whereby integrity of the recorded results can be monitored.

**As per claim 4:** see Shostack on col.7, lines 55-60 and col.10, lines 50-54; discusses extracting the information from the results of an executed computer security threat procedure.

**As per claim 5:** see Shostack on col.7, lines 14-27 and col.10, lines 50-54; discusses describing a computer security incident with said extraction information.

**As per claim 6:** see Shostack on col.12, lines 14-25 and 41-47; discussing displaying information for a particular computer security incident to more than one user.

**As per claim 7:** see Shostack on col.13, lines 7-17; discusses prepopulating fields of a record of a first program module from a second program module.

**As per claim 8:** see Shostack on col.7, lines 10-29; discusses receiving security incident information from a first program module; processing the security incident information with a second program module; and forwarding the processed computer security incident information from the second program module to a third program module.



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**As per claim 9:** see Shostack on col.11, lines 52-54; discusses receiving a selection of a computer security threat procedure comprises automatically selecting a computer security threat procedure with a program module.

**As per claim 10:** Cancelled

**As per claim 11:** see Shostack on col.11, lines 52-54; discussing each steps are performed automatically by a program module.

**As per claim 12:** see Shostack on col.11, lines 52-54; discussing some steps are performed automatically by a program module.

**As per claim 13:** see Shostack on col.13, lines 7-17; discusses displaying reports comprising one or more computer security incidents.

**As per claim 14:** see Shostack on col.12, lines 46-47; discussing the results of an executed procedure comprises at least one of text, numbers, images, or formatted documents.

**As per claim 15:** see Shostack on col.7, lines 13-15; discusses predicting future actions of a source of a computer security incident.

**As per claim 16:** see Shostack on col.5, lines 21-61; discusses identifying the source of a computer security incident.

**As per claim 17:** see Shostack on col.6, lines 42-46; discusses sorting decoy or false security incidents from actual computer security incidents.

**As per claim 18:** see Shostack on col.7, lines 25-29 and col.11, lines 50-51; discusses linking a first computer security threat procedure to a second computer security threat procedure.

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**As per claim 19:** see Shostack on col.12, lines 58-65; discusses determining the authorization level of a user.

**As per claim 20:** see Shostack on col.8, lines 63-67 and col.12, lines 14-25 and 41-47; discusses providing data to enable display of a computer security threat procedure further comprises the step of providing data for enabling display of one or more steps of a computer security threat procedure.

**As per claim 21:** see Shostack on col.8, lines 63-67 and col.12, lines 14-25 and 41-47; discusses providing data to enable display of a computer security threat response procedure; executing the computer security threat response procedure; [col.7, lines 56-57] and in response to executing the response computer security threat procedure, recording executed computer security threat response procedure information and results of the executed computer security threat response procedure [col.7, lines 25-27 and col.13, lines 15-17 and 31-36] *[with at least one of a date and time stamp (See Trcka on col.7, lines 10-12 and col.14, lines 34-36 and col.15, lines 55-57). ]*.

**As per claim 22:** see Shostack on col.8, lines 63-67 and col.12, lines 14-25 and 41-47; discusses providing data to enable display of a computer security threat investigation procedure; executing the computer security threat response procedure; and in response to executing computer security threat investigation procedure [col.7, lines 56-57]; and recording executed computer security threat response procedure information and results of the executed computer security threat response procedure [col.7, lines 25-27 and col.13, lines 15-17 and 31-36] *[with at least one of a date and time*

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*stamp (See Trcka on col.7, lines 10-12 and col.14, lines 34-36 and col.15, lines 55-57)].*

**As per claim 23:** see Shostack on col.8, lines 63-67 and col.12, lines 14-25 and 41-47; discusses providing data to enable display of the computer security threat response procedure further comprises the step of providing data to enable display of one or more steps of the computer security threat response procedure.

**As per claim 24:** see Shostack on col.8, lines 63-67 and col.12, lines 14-25 and 41-47; discusses providing data to enable display of results of the executed computer security threat procedure.

**As per claim 25:** see Shostack on col.7, lines 24-29 and col.11, lines 50-54; discusses providing data to enable display of results of the executed computer security threat procedure.

**As per claim 26:** see Shostack on col.7, lines 24-29 and col.11, lines 50-54; discusses identifying an appropriate computer to execute a step in the computer security threat investigation procedure; and identifying an appropriate computer to execute a step in the computer security threat response procedure.

**As per claim 27:** see Shostack on col.10, lines 52-60 and Trcka on col.7, lines 60-63; discusses accessing a table comprising computer locations and step information; comparing a step to be executed with computer locations listed in the table; determining if a match exists between the step to be executed and the computer locations; and if one or more matches exist, displaying the matching information or automatically selecting appropriate location.

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**As per claim 28:** see Trcka on col.7, lines 60-63 and col.18, lines 1-14; discussing the table further comprises Internet address ranges, the method further comprising the step of comparing an Internet address of a source of a computer security incident with the Internet address ranges of the table.

**As per claim 29:** see Trcka on col.15, lines 50-54; discusses providing data to enable display of an appropriate substitute computer location if a match does not exist.

**As per claim 30:** see Shostack on col.6, lines 58; discusses identifying an appropriate computer to execute a step in either an investigation or a computer security threat response procedure, wherein the computer is strategically located relative to a source of a security incident.

**As per claim 31:** see Shostack on col.7, lines 55-64; discusses executing one or more program modules in response to a selection of a computer security threat procedure.

**As per claim 32:** see Shostack on col.7, lines 55-64; discussing one or more program modules comprises one or more software application programs that can operate as a stand-alone programs.

**As per claim 33:** see Shostack on col.7, lines 55-64; discussing one or more program modules comprises an off the shelf software application programs.

**As per claim 34:** see Shostack on col.9, lines 58-67; discussing the security incident information comprises predefined attributes.

**As per claim 35:** see Trcka on col.7, lines 60-63 and col.18, lines 1-14; discussing the predefined attributes comprise any one of a computer incident severity level, a

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computer incident category, a computer incident scope value, a computer incident status value, an attacker internet protocol (IP) address value, an attacker ISP name, an attacker country, an external attacker status value, an incident type value, a vulnerabilities level, an entry point value, an attack profile value, a target networks value, a target firewalls value, a target hosts value, a target services value, a target accounts value, and a damage type value.

**As per claim 36:** see Shostack on col.9, lines 58-67; discussing the security incident information comprises attributes that are at least one of variable and computer-generated.

**As per claim 37:** see Shostack on col.9, lines 58-col.10, line 9; discusses whether a computer security incident comprises an actual breach in security based upon values of its attributes.

**As per claim 38:** see Shostack on col.6, lines 42-58; discusses receiving a selection for a step of a computer security threat procedure; and generating a pre-execution warning prior to the selection of a step.

**As per claim 39:** see Shostack on col.6, lines 42-58 and col.7, lines 24-29; discusses receiving a selection for a step of a computer security threat procedure, executing the selected step, and suggesting an appropriate subsequent step in the computer security threat procedure.

**As per claim 40:** see Shostack on col.11, lines 52-54; discussing each step is performed automatically in response to a detected computer security incident.

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**As per claim 41:** see **Shostack on col.12, lines 14-48**; discusses providing data to enable display of a plurality of computer tools in a non-procedural manner; receiving a selected for a computer tool; and executing the selected computer tool.

**As per claim 42:**

Shostack, et al. disclose a method for organizing and recording reactions to one or more security incidents, comprising the steps of:

classifying the computer security incident information; **[col.9, lines 59-67]**

automatically suggesting one or more computer security threat investigation procedure based on a classification of the computer security incident information; **[col.11, lines 52-54]**

displaying one or more computer security threat investigation procedures **[col.12, lines 14-25]** for investigating one of suspicious computer activity **[col.6, lines 58]** that occur prior to a computer security threat and an actual computer security threat; **[col.4, lines 50-53]**

displaying the one or more computer security threat response procedures for responding to one of suspicious computer activity comprising one or more attacks received from a network computer **[col.7, lines 13-15]** that occur prior to a computer security threat and an actual computer security threat; **[col.12, lines 41-47]**

in response to a selection of a computer security threat investigation procedure, providing data to enable display of one or more corresponding investigation steps; **[col.7, lines 45-46 and col.8, lines 65-67]**

in response to a selection of a computer security threat response procedure, displaying one or more corresponding response steps; [col.8, lines 2-3 and col.11, lines 49-51]

receiving a selection of one or more investigations steps and one or more corresponding response steps;

storing a permanent record [col.4, lines 34-35] comprising security incident information, executed investigation step and result information, executed response step and result information [col.7, lines 25-27 and col.13, lines 15-17 and 31-36], and [corresponding date and time stamp].

Shostack discusses displaying the one or more suggested computer security threat procedures [col.12, lines 14-25 and 41-47], each computer security threat procedure comprising one or more steps for one of investigating and responding to the computer security incident information [col.6, lines 58 and col.7, lines 25-27]. However, Shostack did not include a date and time stamp and receiving a selection of a suggested computer security threat procedure from a user.

Trcka, et al. discloses an invention that provides a network security and analysis system, which includes a variety of features for automatically and interactively monitoring and analyzing traffic (col.2, lines 11-15 and col.11, lines 1-4). Trcka discloses utilizes archival recordings to evaluate security breaches and other anomalies (col.7, lines 49-50). The archival recordings can be used to perform a wide range of network analysis and restoration tasks that includes checking for newly discovered viruses and performing low-level analysis of network break-ins (col.2, lines 56-61).

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Trcka discusses the date/time stamp reflects the dates and times that the packets are transmitted on the network (col.15, lines 55-57). Thus, preserve the details of the original timing of the traffic on the network and to facilitate the subsequent reconstruction of network events (col.7, lines 10-12).

Further, the claimed "receiving a selection of a suggested computer security threat procedure from a user, the selection comprising one or more steps of the selected computer security threat procedure", broadly limits a computer security threat procedure that is suggested from a user. This does not limit or define what considers a procedure and security threat involves that can be selected or suggested from a user. The claimed subject matter merely suggests as long as the procedure is computer security threat related. For instance, a selection of a suggest computer security threat procedure from a user can broadly be given in light as security configurations to help prevent or monitor security threats, allowing or not allowing particular traffic or incoming packets, a solution to solve security threat, or specifying types of transactions or filtering parameters. Thus, the following will explain and incorporate these examples found in Trcka. Trcka discloses Automated Monitor application uses known data processing techniques (virus checking, transaction, monitoring, etc.) to automatically check for and track suspect network events and one configuration option, a user can enable or disable various visual and audible event alarms (col.17, lines 24-32). The user can configure to alert the user when critical limits are exceeded on the network, generate log file of specific types of events, run analysis applications and perform other interactive actions in the foreground (col.17, lines 35-42). The analysis applications provide various



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functionality for allowing users to interactively perform non-real-time or off line analyses of pre-recorded raw traffic data (col.17, lines 44-50). This shows the user having the ability to interact, which obviously gives instructions to enable a selection of suggested computer security threat procedures in order to receive a selection of suggested computer security threat procedures from a user (col.20, lines 1-17). In addition, Trcka discloses the GUI allows the user to specify the type or types of transactions that are loaded into the databases and/or routed directly to the analysis applications. The types of filtering parameters that can be set by the user include network address, traffic type, packet type, user ID, and packet transaction sequence (col.18, lines 1-14). Trcka discloses the user able to initiate searches of the traffic data at various levels of resolution and search for all packets containing the particular set of source and destination address or for all packets transmitted during a particular time window (col.18, lines 15-52).

Therefore, it would have been obvious for a person of ordinary skills in the art at the time of the invention to combine the teaching of the computer security threat procedure computer based on classification of security incident information as taught by Shostack with the teaching of allowing the user to interactively perform analyses of traffic data such that the receiving a selection of a suggested computer security threat procedure from a user as taught by Trcka because this allows the user to specify computer security threats procedures such as types of transactions that are loaded into the databases (col.18, lines 1-2 and 40-44), configure to generate a log file of specific

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types of events (col.17, lines 38-50), and traffic analysis of the particular packets (col.20, lines 1-17).

Further, it would have been obvious to combine the teaching of recording computer security incident information and the computer security threat procedure as taught by Shostack with at least one of a date and time stamp as taught by Trcka because this preserves the original timing of the traffic on the network and facilitates subsequent reconstruction of network events (col.7, lines 10-12 and col.14, lines 34-36).

**As per claim 43: see Shostack on col.7, lines 24-29 and col.11, lines 50-54; discussing recording executed investigation step information and results of the executed investigation step [*with at least one of a date and time stamp (See Trcka on col.7, lines 10-12 and col.14, lines 34-36 and col.15, lines 55-57)*] in response to a selection of a step of a computer security threat investigation procedure.**

**As per claim 44: see Shostack on col.7, lines 24-29 and col.13, lines 15-17 and 31-36; discussing recording executed response step information and results of the executed response step [*with at least one of a date and time stamp (See Trcka on col.7, lines 10-12 and col.14, lines 34-36 and col.15, lines 55-57)*] in response to a selection of a step of a computer security threat response procedure.**

**As per claim 45: see Shostack on col.12, lines 14-48 and col.13, lines 6-17; discusses providing data to enable display of a plurality of a computer security threat procedures; in response to receiving a selection of a computer security threat procedure, displaying a plurality of steps; obtaining modification information for the selected computer security threat procedure; and storing the modification information.**

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**As per claim 46:** see **Shostack on col.7, lines 24-29**; discusses adding or deleting a step in a procedure.

**As per claim 47:** see **Shostack on col.12, lines 14-48 and col.13, lines 6-17**; discusses providing data to enable display of a plurality of steps of a computer security threat procedure; in response to receiving a selection of a step, providing data to enable display of detailed information fields related to the selected step; obtaining modification information for the selected step; and storing the modification information.

**As per claim 48:** see **Shostack on col.7, lines 24-29**; discusses adding, deleting or modifying a step in a computer security threat procedure.

**As per claim 49:** see **Shostack on col.7, lines 24-29 and col.12, lines 14-48**; discusses obtaining computer security incident search information and providing data to enable display of a plurality of one or more computer security incidents matching the computer security incident search information.

**As per claim 50:** see **Trcka on col.7, lines 10-12 and col.14, lines 34-36 and col.15, lines 55-57**; discusses tracking multiple computer security incidents and storing information for each computer security in accordance with at least one of a date and time stamp.

**As per claim 56:**

Shostack discloses a method for generating a permanent record or one or more computer security incidents and reactions thereto, comprising the steps of:

receiving the computer security incident information indicating one of suspicious computer activity comprising one or more attacks received from a network that occur prior to a computer security threat and an actual computer security threat;

classifying the computer security incident information; [col.9, lines 59-67]

displaying one or more tools for one of investigating one of suspicious computer activity that occurs prior to a computer security threat [col.7, lines 13-17] and an actual computer security threat; [col.4, lines 50-53]

automatically suggesting one or more tools [col.12, lines 15-25 and 45-67] based on a classification of the computer security incident information; [col.11, lines 52-54]

receiving a selection of a suggested tool; in response to a selection of a tool, forwarding data for execution of the tool; and [col.8, lines 2-3 and col.11, lines 49-51]

forwarding data for storing a permanent record comprising computer security incident information, executed tool information [col.7, lines 25-27 and col.13, lines 15-17 and 31-36], and [*corresponding date and time stamp*]

However, Shostack did not include a date and time stamp.

Trcka, et al. discloses an invention that provides a network security and analysis system, which includes a variety of features for automatically and interactively monitoring and analyzing traffic (col.2, lines 11-15 and col.11, lines 1-4). Trcka discloses utilizes archival recordings to evaluate security breaches and other anomalies (col.7, lines 49-50). The archival recordings can be used to perform a wide range of network analysis and restoration tasks that includes checking for newly discovered viruses and performing low-level analysis of network break-ins (col.2, lines 56-61).

Further, Trcka discusses the date/time stamp reflects the dates and times that the packets are transmitted on the network (col.15, lines 55-57). Thus, preserve the details of the original timing of the traffic on the network and to facilitate the subsequent reconstruction of network events (col.7, lines 10-12).

Therefore, it would have been obvious for a person of ordinary skills in the art at the time of the invention to combine the teaching of recording computer security incident information and the computer security threat procedure as taught by Shostack with at least one of a date and time stamp as taught by Trcka because this preserves the original timing of the traffic on the network and facilitates subsequent reconstruction of network events (col.7, lines 10-12 and col.14, lines 34-36).

**As per claim 57: see Shostack on col.12, lines 14-48;** discusses displaying the tools as icons on a computer display.

**As per claim 58: see Shostack on col.12, lines 14-48;** discusses displaying a plurality of tools that are selectable from a menu.

**As per claim 59: see Shostack on col.10, lines 11-25;** discusses installing the one or more program modules within a single program on a server.

**As per claim 60: see Shostack on col.10, lines 11-25;** discusses installing the one or more program modules on a single server.

**As per claim 61: see Shostack on col.11, lines 41-43;** discusses installing the one or more program modules on a computer that is a target of a computer incident.

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**As per claim 62:** see **Shostack** on col.10, lines 11-25; discusses installing the one or more program modules on both a computer that is a target of a computer incident and a server.

**As per claim 63:** see **Trcka** on col.7, lines 60-63 and col.18, lines 1-14; discussing comparing an Internet address of a computer subject to an attack or a security breach with the Internet address ranges of the table.

**As per claim 64:** see **Trcka** on col.7, lines 60-63 and col.18, lines 1-14; discussing comparing an Internet address of a witness to a computer security incident with the Internet address ranges of the table.

**As per claim 65:** see **Trcka** on col.7, lines 60-63 and col.18, lines 1-14; discussing comparing an Internet address of an accomplice to a computer security incident with the Internet address ranges of the table.

**4. Claims 51-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reps, et al. (US 6,070,190), and further in view of Shostack, et al. (US 6,298,445).**

**As per claim 51:**

Reps, et al. discloses a method for selecting a computer that is strategically located relative to a source of a security incident, comprising the steps of:

accessing a table comprising computer, Internet address ranges associated with the computer locations [see col.5, lines 46-48 and col.11, lines 51-52], and computer security threat procedure associated with the computer locations, the computer security threat procedure comprising one or more steps for one of investigating [see col.17, lines 60-67 and col.23, lines 28-35] and responding to one of suspicious computer activity [col.14, lines 62 – col.15, lines 3] comprising one or more attacks received from a network [col.11, lines 28-34 and col.12, lines 8-10] that occur prior to a computer security threat [see col.14, lines 55-57 col.15, lines 37-56 and col.16, lines 12-65] and an actual computer security threat; [see col.14, lines 55-57], the computer location identifying devices that are able to perform the computer security threat procedure; [see col.24, lines 48-66]

comparing a computer security threat procedure to be executed and a target Internet address [col.11, lines 47-59] with computer locations and Internet address ranges listed in the table; [col.14, lines 25-67 and col. 25, lines 15-32]

determining if a match exists between the computer security step to be executed and the computer locations; [col.23, lines 27-48 and col.25, lines 39-42]

determining if a match exists between an Internet address of a computer security incident and Internet address ranges listed in the table; [col.25, lines 31-37]

[automatically selecting a computer to execute the computer security threat procedure based upon the matching step,] wherein the computer has a location and is capable of interacting with the Internet address of the security incident; and [col.11, lines 23-65 and col.25, lines 39-43]

storing a permanent record comprising the executed computer security threat procedure and result information [col.14, lines 62 – col.15, line 3 and col.20, lines 28-32], and corresponding date and time stamps. [col.14, lines 1-15]

Although, Reps teaches monitoring for violation and support problem determination and remediation steps for the detected violation. Reps did not include monitoring, problem determination and remediation steps for attacks and automatically selecting a computer to execute the computer security step.

Shostack, et al. teaches the invention of automatically creating a record for one or more security incidents and reactions thereto, comprising the steps of recording computer security incident information [col.2, lines 62-63 and col.13, lines 42-43], the computer security incident information indicating one of suspicious computer activity comprising one or more attacks received from a network [col.4, lines 47-50 and col.5, lines 20-50] that occur prior to a computer security threat [col.7, lines 13-17] and an actual computer security threat [col.4, lines 50-53] and classifying the computer security incident information [col.9, lines 59-67]. Shostack discloses providing data to enable display of a computer security threat procedure [col.12, lines 14-25 and 41-47] comprising one or more steps for one of investigating and responding to the computer security incident information [col.6, lines 58] whereby receiving a selection of one or more steps of a computer security threat procedure; [col.7, lines 25-27 and col.8, lines 2-3] and recording executed computer security threat procedure information and results of the executed one or more steps of the computer security threat procedure [col.11, lines 49-51]. Shostack discloses automatically may implement the suggested repairs of the system



vulnerabilities [col.11, lines 52-54]. By automatically providing enhancements to a data of security vulnerabilities and using that information to provide security solutions to potentially weak computers (col.4, lines 9-13).

Therefore it would have been obvious for a person of ordinary skills in the art at the time of the invention was made to combine the teaching of monitoring, problem determination, and remediation steps of Rep for attacks and to automatically implement suggested repairs as taught by Shostack because this prevents unauthorized access to the network such that the techniques for breaching computer security have been reported and discovered to automatically provide appropriate solution before a breach occurs (col.7, lines 24-27 and 45-46) even for newly discovered attacks (col.11, lines 50-53).

**As per claim 52:** see Reps on col.9, lines 24-35; discusses if one or more matches exist, providing data to enable display of the matching information and if a match does not exist, providing data to enable display of one or more appropriate substitute computer location or automatically selecting an appropriate location.

**As per claim 53:** see Reps on col.16, lines 34-67; discusses a portion of a computer security threat response procedure, wherein the computer is strategically located relative to a source of a security incident.

**As per claim 54:** see Reps on col.19, lines 27-46; discusses a portion of a computer security threat investigation procedure, wherein the computer is strategically located relative to a source of a security incident.

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**As per claim 55: see Reps on col.15, lines 7-10; discussing one or more off the shelf security application programs.**

***Response to Arguments***

**5. Applicant's arguments filed 1/8/07 have been fully considered but they are not persuasive.**

Traversing the arguments on page 19:

Shostack discloses displaying the procedures and steps or for receiving a selection of a procedure via the graphical user interface (GUI) screen. Shostack discusses the second module accessing the database of security vulnerabilities and assessing network security where the information is accepted from the service and interrogates the service. The second module performs a network scan and may be invoked by activating the check network icon on the graphical user interface screen (col.12, lines 41-47). Thus, Shostack does show the suggested computer security threat procedures or selection of a suggested computer security threat procedure after the software enhancement is received and the suggested repairs of the system vulnerabilities (col.11, lines 50-54 and col.12, lines 14-20 and 45-47). Shostack reads on the displaying the procedure(s) and step(s) or for receiving a selection of a procedure and step(s).

Throughout the Shostack prior art, there are many recitations showing the storing a record comprising the variety of the claimed computer security incident information

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(col.3, lines 66-67; col.4, lines 34-42; col.7, lines 20-35; col.9, lines 57-63; col.11, lines 63-67; and col.12, lines 1-10 and 36-39

Traversing the arguments on page 21:

As for claims 42 and 51: Again, examiner traverses the argument in regards to Shostack not having a display feature or storing a record as referenced above.

Traversing the arguments on page 23-24:

Claim 51 broadly recites Internet address ranges associated with the computer locations where this does not limit any range for the Internet address that is associated with the computer locations. The address ranges associated with the computer can broadly interpret as the computer locations having an Internet address [see col.5, lines 46-48 and col.11, lines 51-52] wherein is associated to the computer security threat procedures that can be accessed by a table [see col.7, lines 53-65]. Further, the claimed computer security threat is broad and does not define or explain further what consists of a security threat. A computer security threat can broadly interpret as anything that deals with violations, breach, vulnerabilities or anything that is unusual from the ordinary for set for that particular system. As such, does not necessarily exclude or include solely for one type of device or application or computing entity. Thus, Reps teaches unsuccessful responses (col.5, lines 33-38 and 63-67), rejected service request (col.10, lines 40-51), or alerting of violations of performance criteria (col.14, lines 56-67) are all reasonably considered as computer security threat.

Traversing the arguments on page 24-25:

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Regarding claims 1 and 56: examiner traverses the argument in regards to Shostack not having a display feature or storing a record as referenced above. As discussed above, Shostack discloses the claimed invention but did not include a date and time stamp. Hence, a secondary art is brought for to teach this limitation that it would have been obvious to combine the teaching of recording computer security incident information and the computer security threat procedure as taught by Shostack with at least one of a date and time stamp as taught by Trcka because this preserves the original timing of the traffic on the network and facilitates subsequent reconstruction of network events (col.7, lines 10-12 and col.14, lines 34-36).

### ***Conclusion***

**6. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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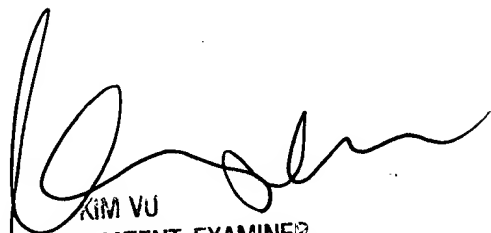
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEYNNA T. HA whose telephone number is (571) 272-3851. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LHa

  
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